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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,486	12/19/2001	Alan W O'Neill	36-1673	7992
23117	7590	08/18/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				HARPER, KEVIN C
		ART UNIT		PAPER NUMBER
				2666

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/018,486	O'NEILL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kevin C. Harper	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 25 January 2005.
- 2a) This action is FINAL.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 25,26 and 29-31 is/are allowed.
- 6) Claim(s) 1-5,7,8,11-14,16,18-23,27 and 28 is/are rejected.
- 7) Claim(s) 6,9,10,15,17 and 24 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 1/05.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

***Response to Arguments***

Applicant's arguments, filed January 25, 2005, with respect to the Acampora reference have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Feder in view of Loehndorf.

The indicated allowability of claims 11, 13 and 18 are withdrawn in regards to Feder in view of Loehndorf. Rejections based on the newly cited reference(s) follow.

***Claim Objections***

Claims 12, 14 and 16-19 are objected to because in claims 12, 14 and 18-19, "said first network address" should be --said network address--. Appropriate correction is required.

***Information Disclosure Statement***

Applicant noted an IDS filed December 10, 2003; however, the electronic copies of the PTO-1449 sheets are not located in the application records.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5, 7-8, 11-14, 16, 18-23 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feder et al. (US 2002/0089958) in view of Loehndorf, Jr. et al. (US 6,094,437).

1. Regarding claims 1, 5, 7, 11-14, 16, 18-22 and 27-28, Feder discloses a method of controlling routing of packets to a mobile node in a packet switching network (fig. 3) having packet switching nodes (fig. 19, router) and access nodes (fig. 3, items 66 and 72) for a routing path defined by routing protocol data held in the switching nodes located along the routing path for a given network address (para. 76, lines 1-2; note: fixed IP address for a mobile device). The method comprises generating first routing protocol data for a network address used by the mobile node specifying a characteristic of a route passing through the first access node (para. 64, lines 6-9; para. 66, lines 1-3; para. 284, last four lines). In response to the mobile node receiving service from a second access node, generating second routing protocol data for the network address (para. 73, last five lines; note: the tunnel between items 72 and 74 remains while a new tunnel between a serving IWF and the home IWF is created for subsequent IWF changes during handover; para. 284, last four lines). However, Feder does not specifically disclose that switching nodes along a route are updated with routing protocol data. Loehndorf discloses that nodes along a tunnel route are updated with next hop routing data (fig. 3, LTM; col. 9, lines 36-43). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have routing protocol data held in switching nodes along a path to a first access node and a second access node in the invention of Feder in order to setup and implement a tunnel in a packet network (Loehndorf, col. 9, lines 38-39).

2. Regarding claims 2-3, in Feder the first and second tunnels (and tunnel identifiers) are unrelated (fig. 3).

3. Regarding claim 4, in Feder the first tunnel is established before the mobile node roams to another serving IWF (fig. 3).

4. Regarding claim 8, in Feder a second tunnel is established based on a control message from the second access node (fig. 14, RADIUS-ACCTG-Start and Start IWF Response from the Serving IWF).
5. Regarding claim 23, in Feder the routing protocol is a link reversal routing protocol (fig. 3, note: bidirectional tunnel links; para. 71, last six lines).

***Allowable Subject Matter***

6. Claims 25-26 and 29-31 are allowed.
7. Claims 6, 9-10, 15, 17 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

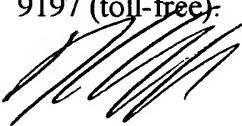
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is [kevin.harper@uspto.gov](mailto:kevin.harper@uspto.gov).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-

9197 (toll-free).



Kevin C. Harper

August 15, 2005



DANG TON  
PRIMARY EXAMINER